Ontario

April 1984

A study of infant stimulation program home visit practices

Prepared for the
Ministry of Community and Social Services
by A.R.A. Consultants

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April, 1984

Dear Readers:

We are pleased to present to you this report on the second phase of a research study of infant stimulation programs in Ontario.

This study documents how the use of the mediator training model of service delivery for infants has been implemented by a representative sample of programs in the province. In particular, the study explores the effects that characteristics of infants, families and workers, as well as program features, have upon what goes on during the infant development worker's visit to the home.

The mediator training model reported in this study, is an approach to family support that provides instruction to parents regarding issues such as general family functioning and infant development, in home role-modelling for infant rearing, and methods of coping with environmental stresses that affect parent-infant relationships.

The study was undertaken to assist infant development programs in their efforts to provide training to parents in caring for infants with developmental handicaps or at risk of such handicaps. The study confirms that distinct client groups are being served and that different procedures are used in response to the unique needs of the client groups. Although the infant development programs were used as the basis for this research, the findings will be of interest to all providers of services to parents and their infant children, and especially in home programs.

We think you will find this report of interest and of value in reviewing and developing programs that provide support to strengthen families and caring for children with special needs.

Yours very truly,

John Burkus

John Burkus

1924 (4/82)

A STUDY OF INFANT STIMULATION PROGRAM
HOME VISIT PRACTICES

PREPARED FOR THE ONTARIO
MINISTRY OF COMMUNITY AND SOCIAL SERVICES
BY A.R.A. CONSULTANTS, TORONTO

SUPPORTED BY
PROVINCIAL LOTTERY FUNDS

APRIL 1984

PREFACE

This study of home visits to 40 clients by 6 infant stimulation programs in Ontario was conducted for the Ministry of Community and Social Services by A.R.A. Consultants of Toronto. This study was made possible through the Provincial Lottery research funds allocated to the Ministry.

Planning and supervision of this study were the responsibility of a Steering Committee including the following members: Maria Berrera, Mary Kovacs, Walter Kushnir, Andy Lalonde, Pat McLaughlin, Faith Mills, David Pederson, Rosemary Proctor, Roma Scott, Fiore Sicoly and Maxine Walsh. The research team included John Renner, Shelagh Emmett and Syd Bergerson.

In the course of the study, the directors, staff and sponsors of 6 programs were approached for information and insights. We thank them for willingly sharing their experience and knowledge with the research team, and consequently with programs throughout the Province.

EXECUTIVE SUMMARY

In 1981, the Ontario Ministry of Community and Social Services commissioned a descriptive survey of the Infant Stimulation programs which it was funding. At the time, there were 40 such programs. Data were collected by means of semi-structured interviews with Program Directors, by the examination of over 800 individual case files, and by discussions with program staff. The results of this study were published, in December, 1982, as a report titled Survey of Infant Stimulation Programs in Ontario. The present report deals with a second research study which arose from the findings observed in the aforementioned survey. For purposes of this report, that first survey will be referred to as the "Phase I" study.

The Phase I study was not designed to provide in-depth information about specific aspects of program management or service delivery. The intent was to provide basic descriptive data about each program. In contrast, the present study focused upon the mode of service delivery in a sample of programs. The present study was designed to assess whether the mode of service delivery being used by the Infant Stimulation programs was consistent with Ministry guidelines, advocating the use of a mediator training model. The specific goals of the study were to document how services were delivered in the field, and to assess the effects of specific variables of interest, such as case type and worker education, on service delivery.

There were two criteria for selecting the programs for this study. The first criterion was the rate of completion of IPPs, based upon the data collected in the Phase I study. Three of the programs had lower IPP completion rates (less than 10%), and three had higher IPP completion rates (more than 60%). The second criterion was the size of the program, defined according to he number of infants served during the preceding year. Two of the programs were small (40 infants or less), two were medium-sized (41 to 80), and two were large (over 80 infants).

The means of data collection included the direct observations by a researcher of a worker during a home visit, discussion with the worker about the case, and an examination of the case files. The researcher accompanied each worker on at least two home visits. A total of 41 home visits were observed during the course of this study.

Further data were collected by means of a telephone interview with the mother following the conclusion of the session which the researcher attended.

As in Phase I, infants were classified according to three major diagnostic categories: high (environmental) risk; developmentally disabled; and both high risk and developmentally disabled. High risk children were those considered to be vulnerable to delays in normal development primarily because of adverse environmental conditions within the family. Developmentally disabled children were categorized primarily on the basis of a chronic or congenital physical condition. Children experiencing both developmental disabilities and adverse environmental conditions were categorized as both high risk and developmentally disabled.

The descriptive characteristics of the 41 cases observed in this study were very similar to the large sample of 800 cases which were sampled for the Phase I study. In fact, every effort was made to ensure that the 41 cases observed in the present study were selected on a random basis so that they would be as representative as possible of the total population of cases served in these programs.

The major emphasis in the present study was not on the infants served, but rather on the manner in which the workers prepared for, delivered and recorded the results of their services. The results of the researcher's observations are summarized in the following paragraphs.

Of course, a note of caution is in order. The presence of a researcher may have motivated some workers to perform in an "ideal" fashion which may not have been representative of their usual manner of service delivery. Also, the addition of an extra person during the home visit might have had a disruptive impact upon both mothers and infants, thereby making the sessions somewhat more difficult than usual for everyone concerned.

It is important to be aware of the possible sources of bias noted above. However, there were other indications that they may not have caused serious

problems. Discussions between researcher and worker, and a review of the written records, provided information as to whether the behaviour observed during the home visit was representative of that worker's average performance. Also, if the worker were to have acted in a completely uncharacteristic fashion, the private telephone interview which the researcher conducted with the mother would probably have brought this to light. With respect to the researcher's influence on either the infant or the mother, this was not an issue. Discussions between the researcher and the worker after leaving the session indicated that, for the most part, the presence of the researcher was inobtrusive and had no significant affect on client behaviour.

The most sigificant factor observed by the researcher was the difference in the manner in which the diagnostic category of the infant influenced worker behaviour. Developmentally disabled cases were treated in a very different fashion from high risk cases. This single factor affected the mode of preparation for a session, treatment during the session, type of worker assigned to the case, and even certain aspects of record-keeping concerning the case.

Virtually all workers indicated that they reviewed previous session notes, reviewed the needs of the mother and the infant, and prepared session goals prior to the home visit. Many workers regularly prepared alternative session plans.

However, there were significant differences in the amount of written information which workers could refer to in both reviewing a case and identifying session goals. These differences were related to diagnostic category of the case. High risk cases were less likely than developmentally disabled cases to have complete medical reports, assessment forms, follow-up reports, and IPP's. The largest difference was in the completion of the IPP. Only half as many IPP's were completed for high risk cases as for developmentally disabled cases.

The larger agencies were more likely to have completed forms than the smaller agencies. Also, workers with medical backgrounds (e.g., nursing) were more likely to have completed forms for their cases than workers with backgrounds in psychology or education.

The most important factor accounting for the differences in IPP completion rates had to do with diagnostic category. Workers dealing with high risk cases engage in very different types of activities than when they work with developmentally delayed cases. With the developmentally disabled cases, the session is very task-oriented. That is, the worker typically reviews with the mother the exercises or tasks assigned during the previous session. A new task, or a variation on the old task, is demonstrated by the worker, and then the mother is encouraged to try it herself.

In high risk cases, the worker interacts with the mother in a much more therapeutic fashion. That is, there are much less likely to be goals or skills to be reviewed or practiced from the previous session. Considerable emphasis is placed on supportive counselling and advice. The sessions seem to be somewhat less structured and it is not unusual for the worker to be faced with a crisis or a problem which had not been anticipated during the planning of the session. This is undoubtedly a reflection of the fact that families of high risk cases report having a much greater number of personal problems that those with developmentally disabled cases.

During the session, the researcher noted that mothers of developmentally disabled children were very attentive to the worker and very responsive to new ideas, approaches or skills to be learned. In contrast, mothers of high risk infants were notably less attentive. They seemed to be less open to trying new approaches to dealing with their children, or to commit themselves to trying to achieve specific goals or complete exercises for subsequent sessions.

Despite these differences in responsiveness to the worker, the researcher's interviews with each mother indicated that they were very satisfied with the program and felt that they were learning new and useful things. However,

mothers of the developmentally delayed cases felt that the program wasn't pushing their child fast enough, where as mothers of high risk cases felt that the program was trying to push their children too fast. This was not seen as a major problem, but it reflects once again the differences in the types of cases being handled by the workers.

The researcher generally felt that his observations of the activities during the home visit, discussions with the worker, and examinations of case files, all indicated that there was considerable agreement between the needs of the child, the worker's plan for the session, and activities during the session. However, there appeared to be a major focus on motor activities for all groups. This focus was perhaps more appropriate for developmentally disabled than for high risk infants who may have benefited from more social activities.

It was also noted that there is a distinct difference in the education of workers and the types of case with which they dealt. Workers with medical backgrounds appeared to be more likely to work with developmentally disabled infants, while workers with a psychological or educational background appeared to be more likely to work with high risk children.

The differences among workers does not account for all the differences noted in the manner in which high risk cases and developmentally disabled cases are handled. That is, the mothers of high risk cases are clearly different from the mothers of developmentally disabled cases. Sessions have to be conducted in a significantly different fashion - whatever the background and training of the worker. It is, nonetheless, interesting to note that workers in agencies do tend to specialize in one or the other type of case. A number of workers reported that they simply didn't feel comfortable in working with the "other kind" of cases.

As a general statement, the researcher was very impressed with the fact that workers were enthusiastic, highly motivated, and with perhaps the exception of the "incomplete records" problem, conscientious. Program planning, delivery and follow-up are usually done very systematically when developmentally delayed cases are involved. In fact, aside from encouraging workers and supervisors to make certain that the "paper work" for each case is done properly (a recommendation which was formally made in the report on the "Phase I" study), it is difficult to make any recommendations which would improve the manner in which developmentally delayed cases are being handled.

On the other hand, workers deal with high risk cases in a very different fashion than with developmentally delayed cases. There are good reasons for this, but existing training programs and recording systems to not seem to adequately reflect this fact. The researchers have concluded that few recommendations can be made to improve the service delivery to developmentally delayed cases. Therefore, all the recommendations for this study deal with procedures for improving service delivery to high risk cases.

It was concluded that the occasional lack of congruence between infant needs and session plans indicates a need to focus on the training of workers dealing with such cases. It is essential that case studies used in the training process should include high risk cases in order to reflect the fact that the perceptions of the mother and the family problems may require a significantly different approach to the preparation of an IPP than in the case of families with developmentally delayed infants. It was recommended that:

- workers who handle a significant high risk case load should receive training in the preparation of IPP's, specifically for such cases.

It was also concluded that there is far too little use made of the mediator training plan. For both developmentally delayed cases as well as high risk cases, a mediator training plan should be completed. However, while workers seem to have clear understanding of how such a mediator training plan should be done for developmentally delayed cases, there seems to be some confusion as to what form such a plan might take for high risk cases. Yet, it is precisely for these types of cases which such a plan would seem to be most critical. It was recommended that:

- the Ministry develop a detailed mediator training plan model for high risk cases and that workers who handle a significant high risk caseload should receive training in the application of this model.

It was concluded that those who work with high risk cases often experience conflicts in the extent to which their role is that of a counsellor or that of a trainer. Many workers have had training in implementation of infant stimulation programs, but little or no training in goal-oriented counselling or counselling related to parent effectiveness. Also, the workers often seem uncertain with respect to their role in assisting cases gain access to professional counselling assistance when needed. It was recommended that:

- the Ministry assess the need for the provision of training workers in the skills of goal-oriented or parent effectiveness counselling.

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CHAPTER I - INTRODUCTION

This chapter reviews some of the background information on the Infant Stimulation programs in Ontario, and describes some of the highlights of of a descriptive study of these programs. The rationale and objectives of the present study are outlined, and some of the relevant published research on the measurement of the effectiveness of Infant Stimulation programs is reviewed.

BACKGROUND TO THE PROGRAM

Since 1976, Infant Stimulation programs in Ontario have been funded under the Developmental Services Act. As of 1981, there were 40 such programs operating in the province, serving more than 1500 infants and their families.

The primary targets of the Infant Stimulation programs are infants who are at risk, either due to developmental disabilities, or because of environmental deprivation. The major goals of these programs are to facilitate the development of infants by organizing and enriching the infants' sensory experiences and by providing training and support to these infants' caregivers. Published research in the area of infant development suggests that special efforts of stimulation of high risk infants during the first two to three years of life can positively affect their growth in language, perceptual, motor and social skills.

In 1977, the Ontario Ministry of Community and Social Services issued guidelines to govern the provision of services to infant populations. The guidelines proposed a multi-disciplinary approach to the delivery of services, recommended very flexible admission criteria for infants, and advocated the use of a mediator training model whereby parents, or other primary caregivers, were to become actively and intimately involved in the infant's program.

Phase I Study

In 1981, the Ministry commissioned a descriptive survey of Infant Stimulation programs in Ontario in order to assess how consistent the activities of these programs were with Ministry objectives, and to provide useful information to improve the effectiveness of such programs. The study collected data on 832 cases (about 50% of the currently enrolled cases) from all 40 programs. Data was collected by means of semi-structured interviews with program directors and information gathered from individual case files. Descriptive information gathered on infants included their primary presenting problems, developmental assessments, referral sources and family characteristics. Programs were evaluated in terms of their staffing patterns, training techniques and the adequacy of records maintained on clients.

The Phase I study provided valuable descriptive information concerning current Infant Stimulation programs in the province. However, it did not provide very much information on the objectives which were set for clients, or the extent to which interactions with the clients were carried out in a constructive, well-planned and expert fashion. In part, the evaluation of the effectiveness of the programs is made more difficult by the low level of completion of assessment forms such as the Bayley Scales of Mental Development, and of Individual Program Plans by the workers. Since the reason for case termination was listed as the achievement of developmental norms for their age for only 14% of the infants (while most cases were terminated simply because the infant had reached the age limit), the issue of program effectiveness is quite compelling.

Goals of the Present Study

The present study of six Infant Stimulation programs in Ontario was designed to document specifically how services were delivered in the field. More specifically, the study sought to determine how well workers program objectives to the needs of the clients they served. One of the mechanisms

selected to assess this objective was whether or not an Individual Program Plan had been completed by the worker. The Phase I study had indicated that IPPs had in fact been completed for only slightly more than one-third of all cases studied. Was completion of IPPs related to style of worker interaction with infants?

Other variables concerning the delivery of services were also of interest. Most important of these variables was the size of the program. Did the type of services delivered tend to vary from program to program according to size? Of additional interest was the relationship of other variables such as the age and socio-demogrpahic characteristics of infants' families. Finally, the project sought to assess the degree of satisfaction of mothers with the program.

CHAPTER II - METHODOLOGY

This chapter reviews the criteria by which programs were selected for the study, and describes the types of data collected. The development of the questionnaire and the data collection procedures are also reviewed.

Selection of Programs

Following consultation with the steering committee, the Ministry of Community and Social Services selected six programs to be included in the study on the basis of two major criteria. The first was size, defined according to the number of infants served by each program during the preceding year. Two of the programs were defined as small, having served 40 infants or fewer; two were classified as medium-sized, having served between 41 and 80 infants; and two were large, having served 81 or more infants. Secondly, programs were selected on the basis of percentage of completion of IPPs in client files. The rates of completion ranged from 0% to 97%. The programs selected represented the range of sponsoring agencies as well as the regional distribution of programs across the province.

In addition, at least two infants per worker were assessed (some workers were evaluated working with up to four infants and their mothers). This was done in order to make comparisons among workers as well as among programs.

Types of Data

The semi-structured questionnaire developed for the study consisted of three parts. The first part was identical to that used in Phase I study and was based on information gathered from each program's case files. This part of the questionnaire collected background data on the client.

The second part of the questionnaire was based on behavioural observations of the worker-mother-infant interaction during an infant stimulation session.

This part of the questionnaire was developed in conjunction with experts in the field of Infant Stimulation following discussions of behavioural variables in workers' sessions with infants that would discriminate between effective and ineffective worker behaviours. A participant observation methodology was adopted for this section of the questionnaire. The worker did not directly ask questions or participate in any way during the session between the worker, infant and mother, but simply sat quietly, observed the behaviour and made notes. Prior to the session, the researcher discussed with the worker his or her impressions of the family as well as the worker's plans for that particular session to be observed. During the session, the researcher assessed the degree of follow-up of previously introduced activities, the quality of the worker-mother-child interaction, the techniques used in the session, and the extent to which loose ends were tied up at the end of the session. The researcher answered closed-ended questions and also made extensive open-ended comments on the kinds of activities which took part during the session.

The final part of the questionnaire consisted of a telephone interview conducted with the mother by the researcher following the conclusion of the session. The mother was asked about her satisfaction with the program, her understanding of the goals and objectives of the program and her assessment of the usefulness of the program both to herself and to her child. Additionally, the researcher wrote evaluative comments during the data collection process concerning his assessment of the strengths and weaknesses of the family as well as other pertinent information.

Data Collection

The data were collected during a six-week period from mid-January 1983 to the end of February 1983. One researcher was responsible for all of the data collection. This researcher had extensive experience in the field of infant stimulation and was enrolled in graduate level work in this area at the time the study was done. The researcher was familiar with worker styles, program delivery issues, and the rationale and objectives of the Ministry's Infant Stimulation programs. To minimize observer bias, he used standardized methods and questions as much as possible.

CHAPTER III - CHARACTERISTICS OF INFANTS AND THEIR FAMILIES

This chapter describes briefly some characteristics of the infants and families who participated in the Phase II study. Overall, the infants in this sample were very similar to the infants who took part in the Phase I study.

Diagnostic Categories

In studying examples of program delivery in six programs, the researchers observed 41 infants. These cases were divided into three categories as follows:

- high risk;
- developmentally disabled;
- both high risk and developmentally disabled.

This method of establishing diagnostic category was similar to that employed in the Phase I study. These categories were determined by the examination of the presenting problems listed in the file by referral agencies and parents, and also by the examination of file information on parental problems (such as alcoholism or child abuse). With the exception of "extended periods of unemployment", any parental problem listed was grounds for classifying children into either the "high risk" or "both high risk and developmentally disabled" category.

In brief, the high risk label was applied to children who were considered to be vulnerable to delays in normal development primarily because of adverse environmental conditions within the family. There was a total of 13 infants categorized as high risk; three boys and ten girls.

A total of 20 children; 13 boys and 7 girls, were categorized as developmentally disabled. Children with developmental disabilities manifested a range of physical problems, including Down's Syndrome, Cerebral Palsy or developmental handicap of unknown etiology. Children who were both developmentally

disabled and high risk formed a third category. These children had both physical difficulties and negative family situations. There were eight infants (five boys and three girls) in this category.

Bayley Scores

There was a considerable amount of missing data for both the Bayley Mental Development Index (M.D.I.) scale and the Physical Development Index (P.D.I.) scale: approximately one-third of the infants had not been tested with the Bayley (compared with 25% in Phase I). One-half of the high risk infants tested and one-third of the developmentally disabled infants had M.D.I. scores lower than 85, indicating below-normal mental functioning. Approximately 50% of infants from all three groups were in the normal range or above (85 or higher) in terms of mental functioning, a higher percentage than that reported in the Phase I study (30%).

There were more similarities among the diagnostic groups in terms of the P.D.I. Approximately 50% of infants who were high risk and infants who were both high risk and developmentally disabled scored in the lowest two quadrants of physical development, indicating fairly serious problems in motor development. This compared to 35% of scores in this range in Phase I. In general, scores on the P.D.I. tended to be lower than scores on the M.D.I.

The number of children in each diagnostic category was roughly similar to that reported during the Phase I study. In terms of primary presenting problems, the most common problems for high risk children were poor parenting skills or immature caregivers. For developmentally disabled children, the most common presenting problems were Down's Syndrome and prematurity. Developmentally disabled children were more apt to be referred by members of the medical profession, while high risk children were more apt to be referred from public health units. The majority of infants were admitted to the program before six months of age. There did not appear to be any strong differences in age at the time of admission.

Family Characteristics

The families of the infants who participated in the Phase II study were very similar to those who took part in Phase I. In terms of variables such as mothers' marital status, the education of parents and the occupation and income levels of parents, this sample appeared to be representative of the Phase I sample.

There were strong differences between the families of infants and the various diagnostic categories, with parents of high risk infants having less education, holding lower-status jobs, and being more apt to be unemployed than parents of developmentally disabled children. Mothers of high risk infants were less likely to be married to the father of their child than were mothers of other infants. High risk families were more apt to be receiving income assistance and were considerably more likely to be living in poverty and receiving income assistance than were the families of developmentally disabled children. These results are not unexpected, given the classification criteria for high risk children. (For a summary of demographic variables describing the Phase II families, see Appendix A).

Summary

The infants and families who took part in the Phase II appeared to be fairly representative of the infants who had taken part in the Phase I study. As in Phase I, the data for this study indicated clear differences among diagnostic category test scores. High risk and developmentally disabled infants differed in terms of Bayley scores, as well as on a number of demographic variables.

CHAPTER IV - WHAT GOES ON IN THE SESSION?

This chapter will describe specific information concerning the techniques used by the worker during the course of a session with a mother and child. Conversations with workers provided information concerning worker plans and preparations for the session, and during the session the researcher observed the interaction and made comments based on those observations. Finally, a telephone interview was conducted after the conclusion of the session with the mother.

Preparation for Sessions

The 19 workers assessed were asked to respond to a series of questions concerning the ways by which they prepared for an individual session with the child. Most workers answered questions about two cases; in some instances, workers were assessed working with one to four cases.

When asked if they prepared for the session using previous session notes, 88% of the workers said that that was usually the case. Fifty-nine per cent of workers said that they almost always prepared by reviewing the overall areas of child development for which the child needed special attention, while an additional 28% indicated that that was often true. Eighty-three per cent of workers indicated that they usually prepared a session plan prior to the session and an additional 15% said that they often did.

When asked if they prepared an alternative session plan, 59% said that they usually did so and an additional 33% said that they often did so. Similarly 90% of workers indicated that they prepared a session goal for each session and an additional 10% said that they often did. Finally, 96% of those workers who responded stated that the plan for the session had fit the goals set out for the child.

It should be noted that there are obvious sources of bias concerning workers' responses to the previous questions. Approximately 90% of all the workers said that they typically prepared session plans for every session based on their review of previous work and the child's needs. Since it is not clear that these session plans were formally written out in any form,

the opportunity for the workers to "look good" on these questions is apparent. There did not appear to be any differences in workers' responses to these questions according to diagnostic categories of the child (Table 4.1).

There appear to be differences among the diagnostic categories of the infants on two of the variables having to do with planning for the session. The first had to do with the workers' bringing toys and equipment for session activities. It appeared that workers were more apt to bring toys and equipment for high risk children than for the children in the other two groups. This may have reflected the workers' perception that high risk children have fewer toys in the home of a stimulating nature.

Another difference between the diagnostic categories appeared in terms of the amount of time in a typical 60 minute session that workers said they usually spent interacting primarily with the mother. The percentage of time that workers reported interacting primarily with the mother was lowest for the mothers of developmentally disabled children (42% of these mothers were interacted with less than 50% of the time). Workers reported usually spending more time with the mothers of high risk children (only 23% of these mothers were usually interacted with less than 50% of the time) and with the mothers of children who were both developmentally disabled and high risk (none of these mothers were interacted with less than 50% of the time). Generally speaking, workers reported usually spending a greater percentage of time interacting with mothers of children who were at high risk or both high risk and developmentally disabled. These worker reports are consistent with the researcher's observations of the sessions attended for this project (Table 4.2).

During the Session

Some differences appeared among the diagnostic categories in terms of the kinds of interactions which took place among the worker, child and mother during the session observed by the researcher. For all three groups, the worker tended to begin the session with a review of what happened the

previous session. In terms of following up upon the assigned task carried on during the week between visits however, workers were more apt to talk about assigned tasks with parents of developmentally disabled children (70%) than with parents of high risk children (31%).

Similarly, mothers of developmentally disabled children were more apt to be asked to demonstrate what was accomplished during the previous week (80%) than were mothers of high risk children (31%). It was also more typical that the mothers of developmentally disabled children were assigned tasks that built on previous homework (61%), expanding what had been learned, than were mothers of high risk children (15%). The mothers of children who were both high risk and developmentally disabled appeared to score midway between the other two groups (Table 4.3).

Interaction Between Workers, Mother and Child

The researcher's observations of the involvement of the mother with the worker during the indicated slight differences between groups, although these differences were not large. There appeared to be a slight tendency for the mothers of developmentally disabled children to be more highly involved in the session (85%) than were mothers of high risk children (62%) or mothers whose children were both high risk and developmentally disabled (50%). Similarly, actual demonstrations of specific behaviours appeared to be somewhat more typical of mothers of developmentally disabled children. This difference among diagnostic groups appeared perhaps most overtly in the researcher's observations of whether the worker demonstrated the task for the mother and subsequently had her demonstrate it with the child. This technique appeared to be used more often with mothers of developmentally disabled children (84%) than with mothers of children in the high risk group (50%).

In terms of the amount of time spent interacting with the mother during the <u>particular</u> session observed by the researcher, this time was relatively consistent with the workers' previous report of the amount of time <u>usually</u> spent with the mother versus the child according to diagnostic category

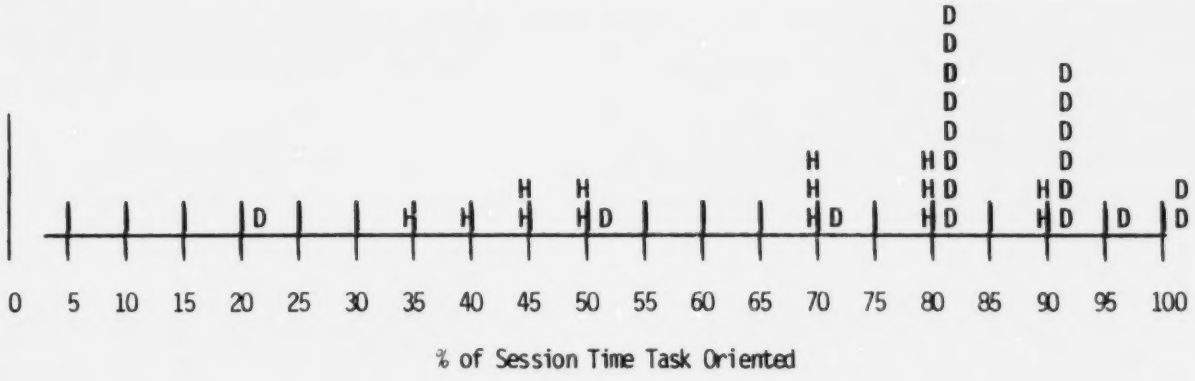
(although the actual percentage of time spent on mother-focused activities was lower). For only 20% of children with developmental disabilities was more time spent with the mothers than with the child; considerably more time (Table 4.4) was spent with the mothers of children who were labelled as high risk (38%) or as both high risk and developmentally disabled (50%).

Differences in worker behaviour was made further apparent by the researcher's estimate of the amount of time that was task-oriented compared to the amount of time that the workers spent interacting therapeutically with the mother. As can be seen by examination of Figure 4.1, workers who were dealing with developmentally disabled children spent almost all of their session time in task-oriented activities, as opposed to interacting in a therapeutic fashion. The average amount of time spent in a task-oriented fashion by workers dealing with developmentally disabled children was 81% (see Table 4.5).

Workers who were dealing with high risk children, on the other hand, were much less consistent in the amount of time they spent in a task-oriented fashion during the session, averaging 63% of time spent focused on the task. Conversely, they spent more time (37%) in a therapeutic fashion.

FIGURE 4.1

TASK-ORIENTED SESSION TIME



LEGEND

H = High Risk

D = Developmentally Disabled

Techniques Used in Sessions

There did not appear to be any major differences among the groups in terms of the extent to which the worker interacted with the child primarily as a training exercise for the mother. The researcher reported that most of the tasks performed with the child had the purpose of instructing the mother. The researcher also reported that workers were more apt to encourage the initiative of the mothers of developmentally disabled children than of high risk children, and workers tended to be slightly less systematic and were less likely to follow plans with high risk families than with developmentally disabled families. These differences were relatively minor, however. In very few cases were workers' actions inappropriate for the needs of the child or did the worker introduce more tasks before the child was ready. (Since none of these items differentiated among groups, tabular data are not reported).

No differences among the diagnostic categories were reported for the tendency of the worker to listen to the mother (all workers listened well), nor was the mother hostile to the worker in any of the families observed. There were differences in responsiveness of mothers according to the diagnostic status of children. Mothers of developmentally delayed children were strongly responsive to the worker in 95% of the cases, but this was true for only 75% of the mothers of children who were both developmentally disabled and high risk and for less than half of the mothers of high risk children, who were more apt to be relatively luke-warm in their responsiveness to the workers. A similar pattern was reflected in the researchers' evaluation of whether or not the mother enjoyed the session: the mothers of developmentally disabled children appeared to enjoy the infant stimulation session more than mothers of infants in the other two categories (Table 4.6).

There were no major differences between the groups in the extent to which the workers used language that mothers were able to understand. There were significant differences among the groups, however, in terms of the extent

to which the mother was perceived by the researcher as being open to instruction. All of the mothers of the developmentally disabled children were rated as open to instruction by the researcher, but only about one-third of the mothers of infants who were high risk or both high risk and developmentally disabled were rated as being open to instruction. "Openness" implies a willingness to listen to the worker, ask questions about new ideas or approaches being suggested by the worker and give some indication that a suggestion made by the worker is likely to be acted upon at a later date. It was noted by the researcher that mothers of high risk children appear to lose interest when being given "verbal instruction" but seem to respond much better to demonstrations or non-verbal approaches.

Conclusion of the Session

Workers appeared to be relatively efficient at tying up loose ends at the conclusion of the sessions, and in every case the worker left the home on a friendly note. Workers usually gave a summary of what had been done during this session, although they were slightly more likely to give such a summary to the mothers of developmentally disabled children (74%) than to the mothers of high risk children (64%). Mothers of developmentally disabled children were more apt to ask what task she could do before the next session, although this might have been a function of the overall greater behavioural orientation of workers with developmentally disabled children.

Almost all of the mothers were given activities to do with their child between sessions, and slightly more than half of the families were left with equipment in order to carry out activities. Although none of the workers left behavioural charts with the parents, the researcher noted that some workers did leave written activity sheets with parents (usually for developmentally disabled children; see Table 4.7).

Congruence of Needs, Plans and Activities

One of the major issues of the current study was the question of whether or not workers' activities during infant stimulation sessions were congruent with the needs of the infants served as well as the workers' own plans for the sessions observed. In order to answer this question, three questionnaire items were coded: the needs of the child as assessed by the researcher, the worker's plan for the session and the activities that took place during the session. The list of needed activities, planned activities and observed activities were categorized into classifications summarizing the content of the activities. The frequency of responses in each category was then compared for each diagnostic group. Note that the frequency of the activity category coded does not refer to the percentage of session time planned or spent, but rather reflects the frequency that various categories of activities were employed.

The coding system was comprised of six major categories. The first category had to do with gross and fine motor activities, such as using large muscle groups or picking up objects. The second category had to do with language activities, such as the infant imitating sounds, following directions, naming objects or general language skills. The third category had to do with social activities and included generalized play activities, feeding, and verbal interaction. The fourth category had to do with cognitive activities and included tasks such as playing with peg boards or puzzles which involved motor components, as well as cognitive activities not involving motor components. The fifth category had to do with assessments including the Denver, the Bayley, or neurological tests. The final category had to do with mother-focused activities, including the worker giving emotional support to the mother, instructing her in child development or child care, or clarifying medical issues.

Infant Needs There were substantial differences in the needs of the child according to diagnostic category as assessed by the researcher (who, it may be recalled, had considerable experience in infant stimulation). The

frequencies are useful in illuminating differences among groups. For example, "motor activities" were much more often cited as a need for developmentally disabled children than for high risk children by infant stimulation workers. By far the most important category of activities needed by developmentally disabled children was motor activities (60%), as compared to the researcher's assessment that 20% of the high risk children needed motor activities. Children who were both high risk and developmentally disabled fell mid-way between these two groups (38%).

Second in importance of assessed needs of developmentally disabled children were language activities, closely followed by cognitive activities. Mother-focused activities made up only 7% of assessed needs. Quite a different picture was presented by the assessment of the needs of the high risk group, for whom the most important category was mother-focused activities (34%), followed by social activities (21%) and motor activities (20%). Again, children who were both high risk and developmentally disabled tend to fall mid-way between the other two groups on these dimensions. The emphasis on mother-focused activities by the researcher for mothers of high risk children seems appropriate if a modelling approach to parenting skills was adopted by the worker (Table 4.8).

Infant Needs and Worker Plans The fit between the assessed needs of the child according to the researcher and the worker's plans for the session was quite good, with the exception that workers tended to plan more mother-focused activities for developmentally disabled infants and for children who were both high risk and developmentally disabled than the researcher assessed as necessary (although the worker's session plans and the needs of the child were similar for mother-focused activities for the high risk children). In addition, the worker planned for fewer social activities than the researcher thought necessary for high risk children. With this exception, the needs of the child, as assessed by the researcher and the workers' session plans, appear to be a relatively good fit, and agreement was quite high across all diagnostic categories.

Across all categories, the researcher's assessment of the children's needs and the workers' plans for sessions differed by an average of less than six percentage points. Since these two figures had been arrived at independently, this appears to represent similar views of the child's needs.

Worker Plans and Session Activities There was less congruence between the actual activities which took place during the session than between the assessed needs of the child and the plans for the session. For example, approximately 35% of workers' plans included mother-focused activities for high risk families, but only about 18% of session tasks were coded as mother-focused activities. On the other hand, workers were more apt to engage in motor activities with children who were both high risk and developmentally disabled, than session plans would suggest.

The difference between planned and actual mother-focused activities is a reflection of the coding system. The researcher coded as "mother-focused" only one-on-one interactions between the worker and the mother. Many therapeutic or emotionally supportive interactions between the worker and mother would naturally take place in the context of ongoing task activities and, therefore, would not be coded as "mother-focused". There were also differences in content of the mother-focused activities; mothers of developmentally disabled children were apt to discuss medical issues with workers (since many of their children had health problems), while mothers of high risk children were more apt to discuss psychosocial issues with their workers.

Overall, the activities conducted by workers during infant stimulation sessions appeared to fit relatively well with session plans and the needs of the child. The differential emphasis in planning on mother-focused activities for the high risk families appeared to be appropriate, given the fact that poor parenting skills had constituted such a large percentage of the presenting problems for this group, and in light of Ministry guidelines concerning the adoption of a mediator-training model. For all groups, there

appeared to be a major focus on motor activities, a focus which was perhaps more appropriate for developmentally disabled than high risk infants who may have benefitted from more social activities. This focus may have been a result of the preverbal stage typical of this age range, however. The different patterning of needs, plans and activities among the diagnostic groups appeared to indicate that workers were responding to these infants according to their particular needs. These treatment differences are probably an index of worker sensitivity and, consequently, their effectiveness.

Satisfaction of the Mother

Following the researcher's observation of a mother-infant-worker session, a telephone interview was conducted with the mother. In general, mothers were highly positive about their experiences with the program. Ninety-three per cent of all the mothers said that their questions had been answered clearly when they had first entered the program and 88% said that the goals of the program were clearly understood. Program staff were rated as helpful by 95% of the respondents and 88% of the mothers said that they had understood what would happen in the program. There were no major differences among the groups in level of satisfaction; 93% of the respondents said that they were quite satisfied with the program. Most mothers indicated that they could contact the worker when they needed help when that was necessary, and that it was relatively easy to contact the worker with questions. The only negative note struck in mothers' responses to questions was concerning the issue of whether or not the program pushed learning too fast for the child. Approximately one-third of all the mothers agreed that the program did in fact push learning too fast for their child. (This response might have been an indirect way of expressing resistance; mothers of high risk children were more apt to say that their children were being pushed too fast, while mothers of developmentally disabled children tended to say that their children were not being pushed fast enough.)

All of the mothers said that they would recommend the program to another mother and they all said that they would recommend the program to a good friend. They agreed that the workers' advice made sense, and almost 85% agreed that they were handling their child better at the present time. Comments on satisfaction with workers were equally favourable.

Approximately 92% of the mothers thought that the sessions observed had been a good one, and 93% of the mothers rated all the sessions so far as good. The child was described as getting along well with the worker by 93% of the mothers and 85% of mothers described the progress of their child as good. The program was described as having helped the mother by 95% of respondents and 98% of respondents described the program overall as good.

Summary

Although there may have been some bias in workers' responses, most workers reported making preparations for the planned sessions. They appeared to spend an appropriate amount of time interacting with the mother according to the diagnostic category of the infant; that is to say workers appeared to spend more time in interacting therapeutically with mothers of high risk children than with mothers of developmentally disabled children. There appeared to be more concentration on specific behavioural activities with mothers of developmentally disabled children.

Workers appear to have adopted a mediator-training model with most of the mothers they worked with. Mothers were usually shown what to do during the session, with the worker demonstrating techniques to the mother and then having her practice them. This was particularly true of mothers of developmentally disabled children.

In terms of the match between infant needs, worker plans and activities in the session, overall, there was a reasonable relationship. In addition, there was appropriate shifting of plans and activities according to the diagnostic category of the infant. For all diagnostic groups, there was an overall emphasis on motor activities.

Mothers seemed very pleased with the program and their particular worker, regardless of the diagnostic category of their children. They indicated that the program had helped them and facilitated in the development of their infant. Overall, mothers seemed enthusiastic about the program.

TABLE 4.1

PREPARATIONS FOR THE SESSION

	Usually Yes		Often Yes		Often No		Usually No		Don't Know	
	No.	%	No.	%	No.	%	No.	%	No.	%
Does worker prepare using last session notes?	36	88	2	5	2	5	1	2	-	
Does worker prepare by overall review of child's needs?	19	59	9	28	1	3	3	9	9	
Does worker prepare a session plan?	34	83	6	15	1	2	-	-	-	-
Does worker prepare an alternative?	23	59	13	33	2	5	1	3	2	5
Does worker have goal for session?	36	90	4	10	-	-	1	4	1	-
Do session plan and goal fit?	24	96	1	4	-	-	-	-	16	-

Note 1: Although numbers are in terms of 41 Infant Stimulation cases (children), data are based on self-reports of 19 workers.

Note 2: Percentages based on number of responses, and do not include "don't know" responses.

TABLE 4.2

TOYS AND EQUIPMENT AT SESSION?

	High Risk		Developmentally Disabled		Both 1 and 2	
	No.	%	No.	%	No.	%
"Yes" Responses	12	92	13	65	3	38
"No" Responses	1	8	7	35	5	62
Total	13	100	20	100	8	100

PERCENTAGE OF TIME SPENT INTERACTING WITH MOTHER

	High Risk		Developmentally Disabled		Both 1 and 2	
	No.	%	No.	%	No.	%
Less than 50%	3	23	8	42	0	-
About 50%	6	46	8	42	3	38
More than 50%	4	31	3	16	5	62
Total	13	100	19	100	8	100

Note 1: 1 missing case.

Note 2: (Workers' report).

TABLE 4.3

ACTIVITIES AT BEGINNING OF SESSION

	High Risk		Developmentally Disabled		Both 1 & 2		Total	
	No.	%	No.	%	No.	%	No.	%
Does worker begin with review of last session?								
"Yes" Responses	11	85	19	95	7	87	37	90
"No" Responses	2	15	1	5	1	13	4	10
Total	13	100	20	100	8	100	41	100
Does worker discuss assigned tasks?								
"Yes" Responses	4	31	14	70	5	63	23	56
"No" Responses	9	69	6	30	3	37	18	44
Total	13	100	20	100	8	100	41	100
Does mother demonstrate what was accomplished last time?								
"Yes" Responses	4	31	15	80	4	50	23	56
"No" Responses	9	69	5	20	4	50	18	44
Total	13	100	20	100	8	100	41	100
Does worker build and expand on homework?								
"Yes" Responses	2	15	11	61	5	63	18	46
"No" Responses	11	85	7	39	3	37	21	54
Total	13	100	18	100	8	100	39	100

TABLE 4.4

INTERACTIONS IN SESSION

	High Risk		Developmentally Disabled		Both 1 & 2		Total	
	No.	%	No.	%	No.	%	No.	%
Is mother involved?								
"Usually Yes"	8	62	17	85	4	50	29	71
"Often Yes"	4	31	3	15	4	50	11	27
"No" Responses	1	7	-		-		1	2
Total	13	100	20	100	8	100	41	100
Is mother shown what to do?								
"Usually Yes"	10	77	19	100	8	100	37	93
"Often Yes"	3	23	-		-		3	7
"No" Responses	-		-		-			
Total	13	100	19	100	8	100	40	100
Worker first demonstrates task, then mother does it?								
"Yes" Responses	6	50	16	84	6	86	28	74
"No" Responses	6	50	3	16	1	14	10	26
Total	12	100	19	100	7	100	38	100
More time spent with mother than with child?								
"Yes" Responses	5	38	4	20	4	50	13	32
"No" Responses	8	62	16	80	4	50	28	68
Total	13	100	20	100	8	100	41	100

TABLE 4.5

DIVISION OF SESSION TIME

	High Risk		Developmentally Disabled		Both 1 & 2	
	No.	%	No.	%	No.	%
Average % of Time Task-Oriented	8	63	16	81	5	67
Average % of Time Therapeutically Oriented	5	37	4	19	3	33
	13	100	20	100	8	100

TABLE 4.6

SOCIOEMOTIONAL INTERACTION WITH MOTHER

	High Risk		Developmentally Disabled		Both 1 & 2		Total	
	No.	%	No.	%	No.	%	No.	%
Mother responsive to worker?								
"Usually Yes	6	46	19	95	6	75	31	76
"Often Yes"	6	46	1	5	1	12	8	20
"No" Responses	1	8	-		1	13	2	4
Total	13	100	20	100	8	100	41	100
Does mother enjoy session?								
"Yes" Responses	11	85	18	90	5	63	34	83
"No" Responses	2	15	2	10	3	37	7	17
Total	13	100	20	100	8	100	41	100
Does worker speak to mother in language she understands?								
"Yes" Responses	12	92	20	100	7	87	39	96
"No" Responses	1	8	-		1	13	2	4
Total	13	100	20	100	8	100	41	100
Is mother open to instruction?								
"Yes" Responses	4	31	20	100	3	38	27	66
"No" Responses	9	69	-		5	62	14	34
Total	13	100	20	100	8	100	41	100

TABLE 4.7

CONCLUSION OF SESSION

	High Risk		Developmentally Disabled		Both 1 & 2		Total	
	No.	%	No.	%	No.	%	No.	%
Does worker tie up loose ends?								
"Yes" Responses	12	92	19	95	8	100	39	95
"No" Responses	1	8	1	5	-		2	5
Total	13	100	20	100	8	100	41	100
Does worker give summary?								
"Yes" Responses	7	64	14	74	8	100	29	76
"No" Responses	4	36	5	26	-		9	24
Total	11	100	19	100	8	100	38	100
Mother have input to next session?								
"Yes" Responses	5	38	17	85	4	50	26	63
"No" Responses	8	62	3	15	4	50	15	37
Total	13	100	20	100	8	100	41	100
Equipment left?								
"Yes" Responses	9	69	11	55	5	63	25	61
"No" Responses	4	31	8	45	3	37	16	39
Total	13	100	19	100	8	100	41	100

TABLE 4.8

FREQUENCIES OF NEEDED ACTIVITIES,
PLANNED ACTIVITIES AND OBSERVED ACTIVITIES

	Motor Activities %	Langugage Activities %	Social Activities %	Cognitive Activities %	Assessments %	Mother-Focussed Activities %
HIGH RISK:						
Needs of Child	20	14	21	11	-	34
Plans for Session	29	16	6	8	6	35
Activities During Session	37	13	11	17	4	18
DEVELOPMENTALLY DISABLED:						
Needs of Child	60	12	7	12	2	7
Plans for Session	53	10	7	7	2	21
Activities During Session	56	13	9	8	2	12
BOTH HIGH RISK & DEVELOPMENTALLY DISABLED:						
Needs of Child	38	13	12	6	6	25
Plans for Session	27	8	12	5	5	43
Activities During Session	47	19	7	7	2	18

CHAPTER V - CHARACTERISTICS OF WORKERS AND PROGRAMS

This chapter summarizes information having to do with completion of relevant documents, education of workers and program characteristics.

Education of Workers

There were two major classifications of educational backgrounds for workers: those with a medical/physiological background and those without. The two most common educational degrees were in early childhood education and in nursing.

Workers with degrees in psychology or early childhood education were more apt to work with high risk children than were those with medical backgrounds, while there appeared to be a tendency for workers with medical backgrounds to work with developmentally disabled children or those who were both developmentally disabled and high risk. Almost 70% of the high risk children had workers with educational or psychological backgrounds, while this was true of only 45% of developmentally disabled children. These differences did not seem to be a function of the type of agency; the workers from the health units and hospital units were just as apt to have teaching or psychology backgrounds as they were to have nursing backgrounds (Table 5.1).

Characteristics of Workers

Based on qualitative observations of the researcher, it appears that the most effective workers were those who were able to develop a global approach to the problems that they were faced with. Good workers had a thorough knowledge of the mechanics of child development, and were able to communicate this knowledge to mothers. A good general knowledge of child development issues was not limited to workers from one particular background, although in some cases pediatric nurses had a great deal of hands-on experience working with children with a variety of problems.

A factor which tended to increase the credibility of workers was whether or not they had children themselves. If they themselves were mothers, particularly if they were someone older than the mothers they worked with, they tended to be given more credence by mothers, especially high risk mothers.

Discussions with individuals with expertise in the field suggest that some workers with a medical background tended to be among the most effective of the workers observed. They seemed to incorporate medical knowledge (and a corresponding ability to communicate that information to mothers) with an interest in and facility for interpersonal communication. Their medical knowledge, their action orientation, and their interest in people combined to make their skills particularly useful in their role as infant stimulation workers. What appeared to be necessary in order for individuals with a primarily medical background to be effective with high risk families was skill in interpersonal communication.

No differences between the two groups of workers emerged on the questions eliciting mothers' satisfaction with the programs. Apparently, both groups of workers were seen as effective and helpful by the mothers they served.

Completion of Forms

There were wide variations in the percentage of forms completed. Almost all of the referral forms (97%) and almost all of the appointment forms (92%) had been completed. Similarly, there was a high rate of completion (86%) of family history forms, although this percentage dropped considerably (62%) for high risk families. The programs assessed had a much higher completion rate for family history forms than the average for the Phase I study (26%). It may be more difficult to obtain a completed family history form for high risk families, but it would appear that such family histories might be even more important for these families than for families of developmentally disabled children, especially if this information were used to affect programming (see Table 5.2).

Although assessment forms had been completed for 75% of the sample, only 46% of the children from high risk families had received a psychological assessment such as the Denver (this question did not include the number of times that the Bayley was administered). Coupled with the fact that only one-third of all the families had received medical assessments and that the rate of completion of the medical forms was lowest for infants from high risk families (23%), it would appear that there are substantial gaps in information about medical and psychological status for many of these children, particularly infants from high risk families.

This lack of information has a potential for negative consequences. For example, a relatively hard-to-detect problem such as hearing loss or reduced visual field could have a considerable impact on the child's ability to learn, but might not be readily apparent to either the parents or to the worker.

There was a correspondingly low rate of completion of mediator training plans (34%), which was similar to the rate reported in Phase I (26%).

Completion of IPPs

One criterion used for selecting the six programs studied had been their overall rate of completion of IPPs during the Phase I study. The extent to which IPPs were available in files and subsequently completed was higher than the average noted in Phase I because of this selection process. Overall, slightly more than half of the 41 cases studied had complete IPPs.

In general, the three programs which had a high rate of completion of IPPs during Phase I had a high rate of completion of forms for the 41 infants evaluated for the present study. For example, programs selected for a high percentage of completion of IPPs during the Phase I study had a similar high percentage of completion of IPPs for these infants (19 out of 22) as

compared to infants who came from agencies with a low percentage of completion of IPPs (5 out of 19).

This difference across agencies in completion rates for forms held true for other file material. Those agencies with a high IPP completion rate also had a high percentage of psychological assessments completed for the infants in their programs (18 out of 22) compared to those programs with a low percentage of IPP completions (12 out of 19).

Perhaps most striking was the rate of completion of mediator training forms: for the programs with high IPP completion rates, 13 out of 22 mediator training forms were completed, while only one such form was completed for those programs with low completion rates.

Form Completion and Worker Education

Completion of IPPs appeared to vary along other dimensions of interest in this study. For example, developmentally disabled children were more apt to have completed IPPs in their file (70%) than were high risk children (39%) (see Table 5.2).

There were considerable differences in IPP completion according to the educational background of the worker. Only seven of the 20 infants who had workers with educational or psychological backgrounds had completed IPPs, while 17 of the 21 infants who had workers with medical backgrounds had completed IPPs. This difference between IPP completion in terms of worker background was paralleled by the probability of infants receiving medical or psychological assessments. Infants who had workers with psychological or educational backgrounds were considerably less likely to receive such assessments (9 out of 20) than were infants who were assigned workers with medical backgrounds (17 out of 21).

These differences between workers' educational background did not appear for the completion of mediator training plans: these were completed by seven of

the 20 infants who had workers with psychological or educational background and seven of the 21 infants who had workers with medical backgrounds.

Perhaps these differences in completion of IPPs, and medical or psychological assessments reflect the differential orientation of workers from different educational backgrounds, as well as their tendency to specialize in working with infants from different diagnostic categories. For example, workers with medical backgrounds may have been more accustomed to the completion of "patient forms" than workers from psychological or educational backgrounds, or nurses' tendency to complete IPPs may have reflected their greater emphasis on the attainment of specific behavioural objectives.

IPP Completion and Program Characteristics

Of the agencies studied, the larger agencies appeared to maintain better records on the infants served. Larger agencies tended to have completed a higher percentage of virtually every form in clients' files, while medium-sized programs tended to have completed fewer of the forms, and small agencies completed the fewest forms. This pattern was true even though of the two programs selected from small, medium, and large categories, one was selected on the basis of low IPP completion and one had been selected on the basis of high IPP completion (see Table 5.3).

According to the researcher, programs with low IPP completion rates tended to have difficulties retrieving necessary data. Files were not well maintained, and workers often did not know how to locate key file information.

An additional strength of the larger programs appeared to be the capacity for instituting a more comprehensive range of programs. The larger programs were able to introduce both a wider range of services (such as specialized in-centre services for particular groups of clients) as well as to include

workers from a variety of disciplinary backgrounds. Consequently, the larger agencies were more able to provide special services for which they saw a clear need, and could more easily respond to Ministry guidelines that a multidisciplinary approach be adopted for service delivery.

Summary

Workers with different educational backgrounds appeared to specialize in the type of client served; with workers with educational or psychological degrees being more likely to serve high risk families, and workers with medical training tending to serve developmentally disabled children. Regardless of educational background or the type of clients served, the best workers appeared to be those whose educational background had equipped them with a global view of child development, and who had also developed good interpersonal skills.

In terms of completion of forms, there were wide variations in completion rates, with high risk families tending to have the lowest completion rates. Completion of forms tended to vary as a function of whether or not programs had been selected as having high or low IPP completion rates, as well as whether the worker had a medical or psychological/educational background. Completion of forms in general and of IPPs also tended to vary with program size, with larger programs appearing to have better recordkeeping systems.

TABLE 5.1

WORKER EDUCATION

	High Risk		Developmentally Disabled		Both 1 & 2		Total	
	No.	%	No.	%	No.	%	No.	%
Teaching	1	8	1	5	-	-	2	5
Psych. BA/BSc	2	15	2	10	-	-	4	10
Early Childhood Education	6	46	6	30	2	25	14	34
Nursing	3	23	10	50	4	50	17	41
Occupational Therapist	1	8	1	5	2	25	4	10
	13	100	20	100	8	100	41	100

NOTE: Although table represents 41 Infant Stimulation cases, information concerns 19 workers.

Agency Type

Workers' Educational Background	Health Units And Hospitals		Mental Health Associations		Total	
	No.	%	No.	%	No.	%
Educational/ Psychological	7	70	5	55	12	63
Medical	3	30	4	45	7	37
	10	100	9	100	19	100

TABLE 5.2

PRESENCE AND COMPLETION OF FORMS

	High Risk		Developmentally Disabled		Both 1 & 2		Total	
	% Present	% Complete	% Present	% Complete	% Present	% Complete	% Present	% Complete
Referral Form	92	92	100	100	100	100	98	97
Medical Report	23	23	45	45	38	38	34	34
Assessment Form	67	46	90	80	100	100	85	75
Family History	69	62	95	95	100	100	88	86
IPP	39	39	70	70	75	63	61	57
Mediator Training Plan	46	46	30	30	25	25	34	34
Appointment Record	100	77	100	100	100	100	100	92
Termination Summary	85	-	100	-	100	25	95	8
Follow-up Report	39	-	60	-	50	-	51	-

NOTE: All percentages based on 13 High Risk cases, 20 Developmentally Disabled cases, and eight Both 1 and 2 cases.

TABLE 5.3

COMPLETION OF FORMS BY PROGRAM SIZE

Forms	Small % Completed	Medium % Completed	Large % Completed
Referral Form	91	100	100
Medical Report	27	58	28
Assessment Report	64	58	89
Family History Form	73	83	94
IPP	27	50	83
Mediator	36	-	56
Appointment Form	82	100	100
Termination	-	-	-
Follow-up	-	-	-

NOTE: All percentages based on 11 cases from small programs, 12 cases from medium-sized programs, and 18 cases from large programs.

CHAPTER VI - CONCLUSIONS AND RECOMMENDATIONS

It seemed clear in terms of the data collected for both this and the Phase I study, that there were two distinct client groups being served: infants from high risk families and infants who were developmentally disabled. These differences had implications for all aspects of service delivery.

Differences Among Diagnostic Categories

As a general statement, the researcher was very impressed with the fact that workers were enthusiastic, highly motivated, and with perhaps the exception of the "incomplete records" problem, conscientious. Program planning, delivery and follow-up are usually done very systematically when developmentally delayed cases are involved. In fact, aside from encouraging workers and supervisors to make certain that the "paper work" for each case is done properly (a recommendation which was formally made in the report on the "Phase I" study), it is difficult to make any recommendations which would improve the manner in which developmentally delayed cases are being handled.

It seemed clear that there was differential patterning of activities during the Infant Stimulation session according to the diagnostic category of the child. Workers were more apt to concentrate on specific behavioural activities with developmentally disabled children than with high risk children. This concentration on specific behavioural tasks may be more appropriate for developmentally disabled than high risk children. The mothers of high risk children seem to require more general therapeutic interpersonal interaction and support from the worker.

Since these differences in worker behaviour emerged with a high degree of consistency across a number of different measures, it seems reasonable to conclude that different styles of worker behaviour may be appropriate for infants in different diagnostic categories. Workers with high risk infants appear to focus more on providing emotionally supportive models of appropriate caregiving. Infant Stimulation workers who deal primarily with high

risk children may benefit from specific training in teaching appropriate emotional responses and caregiving behaviour to mothers. This emphasis may differ from training which stresses the importance of techniques aimed at facilitating infants' development only.

Given the findings of consistent differences in worker behaviours as a function of the diagnostic category of infants served, it may be appropriate to focus on the particular training needs of workers with high risk infants.

IPP's for High Risk

The occasional lack of congruence between infant needs and session plans indicates a need for renewed training of workers dealing with such cases. It is essential that case studies used in the training process should focus on high risk cases in order to reflect the fact that the perceptions of the mother and the family problems may require a significantly different approach to the preparation of an IPP than in the case of families with developmentally delayed infants. It is recommended that:

- o workers who handle a significant high risk case load should receive training in the preparation of IPP's, specifically for such cases.

More Mediator Training Plans

It was also concluded that there is far too little use made of the mediator training plan. For both developmentally delayed cases as well as high risk cases, a mediator training plan should be completed. However, while workers seem to have clear understanding of how such a mediator training plan should be done for developmentally delayed cases, there seems to be some confusion as to what form such a plan might take for high risk cases. Yet, it is precisely for these types of cases which such a plan would seem to be most critical. It was recommended that:

- o the Ministry develop a detailed mediator training plan model for high risk cases and that workers who handle a significant high risk caseload should receive training in the application in this model.

Goal-Oriented Counselling

It was concluded that those who work with high risk cases often experience conflicts in the extent to which their role is that of a counsellor or that of a trainer. Many workers have had training in implementation of infant stimulation programs, but little or no training in goal-oriented counselling or counselling related to parent effectiveness. Also, the workers often seem uncertain with respect to their role in assisting cases gain access to professional counselling assistance when needed. It was recommended that:

- the Ministry assess the need for the provision of training workers in the skills of goal-oriented or parent effectiveness counselling.

APPENDIX A

All of the following tables contain information comparing infants from the Phase I study (the left-hand column) and those from the Phase II study (the three right-hand columns).

For each of the following tables, 832 cases were sampled during the Phase I study, and 41 cases were sampled for the Phase II study. Of the 41 Phase II cases, 13 infants were High Risk, 20 were Developmentally Disabled, and 8 infants were both High Risk and Developmentally Disabled.

TABLE A.1

REFERRAL SOURCE

Referral Source	Phase I Study	Phase II Study		
	All Cases	High Risk	Developmentally Disabled	Both 1 & 2
Self	6	-	5	-
Public Health Nurse	33	68	40	36
Children's Aid Service	9	8	5	13
Family Physician	25	-	5	13
Hospital	7	8	15	-
Family Service Agency	4	8	10	13
Pediatricians	4	8	20	25
Other/Don't Know	12	-	-	-
	100%	100%	100%	100%

TABLE A.2

BAYLEY SCORES AT INTAKE

M.D.I. SCORES

	Phase I Study		Phase II Study	
Total Scores	All Cases	High Risk	Developmentally Disabled	Both 1 & 2
52 and under	21	-	10	25
53 - 68	11	-	5	-
69 - 84	14	23	20	12
85 - 100	18	8	20	25
101 - 116	9	8	15	13
117 - 132	2	8	-	-
133 and over	0	-	-	-
Missing	25	53	30	25
	100%	100%	100%	100%

TABLE A.3

P.D.I. SCORES

	Phase I Study		Phase II Study	
Total Scores	All Cases	High Risk	Developmentally Disabled	Both 1 & 2
52 and under	25	8	25	38
53 - 68	10	15	-	12
69 - 84	13	-	10	12
85 - 100	14	16	30	26
101 - 116	6	-	10	-
117 - 132	3	-	-	-
133 and over	1	8	-	-
Missing	28	53	25	12
	100%	100%	100%	100%

TABLE A.4

MOTHER'S MARITAL STATUS

	Phase I Study	Phase II Study		
Total Scores	All Cases	High Risk	Developmentally Disabled	Both 1 & 2
Married to Father	73	46	95	75
Married to Other	2	-	-	-
Separated/Divorced	4	8	-	-
Common Law	7	38	5	-
Unwed Parent	11	8	-	25
Other/Don't Know	2	-	-	-
	100%	100%	100%	100%

TABLE A.5

FATHER'S EDUCATION

	Phase I Study		Phase II Study	
Total Scores	All Cases	High Risk	Developmentally Disabled	Both 1 & 2
Grade School	6	31	15	12
Some High School	17	39	10	50
Completed High School	14	7	30	13
Some College	3	-	15	-
Some University	4	-	10	-
University Grad/Post Grad	9	-	15	-
Other/Don't Know	45	23	5	25
	100%	100%	100%	100%

TABLE A.6

MOTHER'S EDUCATION

	Phase I Study		Phase II Study	
Total Scores	All Cases	High Risk	Developmentally Disabled	Both 1 & 2
Grade School	11	31	10	25
Some High School	25	62	45	50
Completed High School	-	-	5	-
Some College	5	-	-	-
Some University	8	-	5	-
University Grad/Post Grad	7	-	5	-
Other/Don't Know	45	7	30	25
	100%	100%	100%	100%

TABLE A.7

FATHER'S OCCUPATION

	Phase I Study	Phase II Study		
	All Cases	High Risk	Developmentally Disabled	Both 1 & 2
Professional	11	-	5	-
Managerial	2	-	-	-
Clerical	1	8	15	-
Sales Workers	4	-	30	12
Skilled Operatives	14	-	-	12
Service Workers	10	-	10	-
Labourers	22	15	25	39
Supervisors	3	-	10	-
Unemployed	11	39	5	12
On Disability	N/A	15	-	-
Father Absent	N/A	23	-	25
Don't Know	22	-		-
	100%	100%	100%	100%

TABLE A.8

MOTHER'S OCCUPATION

	Phase I Study	Phase II Study		
	All Cases	High Risk	Developmentally Disabled	Both 1 & 2
Professional	9	-	5	-
Managerial	-	-	-	-
Clerical	6	7	5	-
Sales Workers	2	-	-	-
Skilled Operatives	1	-	-	-
Service Workers	5	-	-	-
Labourers	3	7	5	-
Supervisors	-	-	-	-
Homemaker	63	86	70	87
On Maternity Leave	-	-	15	-
On Disability	-	-	-	-
Don't Know	11	-	-	13
	100%	100%	100%	100%

TABLE A.9

TYPE OF INCOME ASSISTANCE TO FAMILIES

	Phase I Study	Phase II Study		
Source of Assistance	All Cases	High Risk	Developmentally Disabled	Both 1 & 2
Welfare	8	39	5	26
UIC	2	-	-	12
Mother's Allowance	10	31	-	-
Handicapped Child Allowance	8	-	5	-
Disability (Parent)	N/A	15	5	12
Maternity Leave	N/A	-	15	-
Other/Don't Know	4	-	-	-
None	68	15	70	50
	100%	100%	100%	100%